

AMENDMENT UNDER 37 C.F.R. 1.111
U.S. Appln. No. 10/009,796
Attorney Docket No. Q67530

REMARKS

Claims 1-28 have been canceled.

Claims 29-38 are presented for the Examiner's consideration. Claim 29 finds support, for example, at page 15, lines 16-19 and pages 16 to 17 of the specification, and in original claims 23, 25, 26 and 28. Claims 30 and 31 find support, for example, at page 5, lines 18-19 and page 7, lines 20-22, respectively. Claims 32-38 find support for example, in original claims 17-22 and 24, respectively.

No new matter has been added and entry of the Amendment is respectfully requested. Upon entry of the Amendment, claims 29-38 will be all the claims pending in the application.

Claims 1, 2, 4, 6-8, 12-17, 19-21 and 25-28 were rejected under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Achenbach et al (US 6,194,508). Further, claims 1-8, 12-21 and 25-28 were rejected under 35 U.S.C. § 103(a) as obvious over Achenbach et al in view of Calvin (US 4,054,689) or Leathers et al (US 4,508,538). Lastly, claims 1-4, 6-17 and 19-28 were rejected under 35 U.S.C. § 103(a) as obvious over WO 99/60039 (Takahashi) and Achenbach et al.

Applicants respectfully submit that all of the rejections are moot because claims 1-28 have been canceled.

Applicants respectfully submit that new claims 29-38 are patentable over the cited references for at least the following reasons.

1. Claims 29-38 are not anticipated nor rendered obvious by Achenbach et al

Claim 29, from which claims 30-38 depend, requires a cross-linkable fluorine-containing elastomer component, as in canceled claims 10 and 23, which were not rejected over Achenbach et al. Accordingly, Applicants respectfully submit that claims 29-38 are novel and patentable over Achenbach et al.

2. Claims 29-38 are not obvious over Achenbach et al in view of Calvin or Leathers et al

Claim 29, from which claims 30-38 depend, requires a cross-linkable fluorine-containing elastomer component, as in canceled claims 10 and 23, which were not rejected over Achenbach et al in view of Calvin or Leathers et al. Accordingly, Applicants respectfully submit that claims 29-38 are patentable over Achenbach et al in view of Calvin or Leathers et al.

3. Claims 29-38 are not obvious over WO '039 and Achenbach et al

WO '039 does not disclose the particular semiconductor production apparatuses as claimed in present claim 29. Further, WO '039 not only fails to teach an ultra fine powder of silicon oxide having a low dioctylphthalate absorption of not more than 8 μg per 1g of silicon oxide, but also that the amount of dioctylphthalate gas generated when the sealing member itself is heated at 200°C for 15 minutes does not exceed 1 ppb, a characteristic and essential element of present claim 29.

Although WO '039 aims to reduce the generation of HF on heating to a high temperature so as to prevent corrosion of steel and quartz materials present in the semiconductor

manufacturing equipment (page 1, lines 20-29), WO '039 does not consider contamination by dioctylphthalate (DOP). In this regard, Applicants note that WO '039 further discloses that "plasticizers" may be incorporated into the compositions described therein (page 8, lines 11-16, particularly, line 11). As described in the present specification, and as well known in this field of art, DOP is a typical plasticizer used in a large amount in an ordinary living environment (page 3, lines 16-21). Thus, WO '039 clearly does not seek to reduce DOP contamination.

In contrast, an object of the present invention is to reduce the adverse effect of impurity gases (outgas) generated due to decomposition or modification of the materials of parts, particularly upon accurate etching treatment of semiconductor elements, by reducing the DOP content of the sealing material. Unlike HF which is addressed by WO '039, it is well known that DOP is not corrosive. That is, WO '039 does not teach the problem solved by the present invention or its source, such that the Applicants' solution thereof is accordingly unobvious over WO '039. Restated, WO '039, which does not address or consider DOP contamination, cannot lead one of ordinary skill to achieve the molded sealing material of present claim 9 having a reduced DOP content - in the absence of Applicants' teachings in the present specification.

Achenbach et al does not rectify the deficiencies of WO '039. Achenbach et al discloses the use of the silicone rubber composition in articles which are exposed to a dirty (living) environment (col. 7, lines 6-17). Achenbach et al does not disclose the presently claimed particular semiconductor production apparatuses or use of an ultra fine powder of silicon oxide having a dioctylphthalate absorption of not more than 8 μg per 1g of silicon oxide, or that the sealing material itself must not generate dioctylphthalate gas when heated at 200°C for 15

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minutes in an amount of not more than 1 ppb. Particularly, as discussed above, it is the combined use of such ultra fine powders of silicon oxide and a sealing material generating a reduced amount of DOP, together, which is a characteristic feature of the invention.

In view of the foregoing, Applicants respectfully submit that claims 29-38 are patentable over WO '039 and Achenbach et al.

Withdrawal of all rejections and allowance of claims 29-38 is earnestly solicited.

If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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